

BILLING CODE 5010-06

50 CFR Part 17**Endangered and Threatened Wildlife and Plants; Proposed Endangered Status for *Goetzea elegans* (Beautiful Goetzea)**

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The U.S. Fish and Wildlife Service proposes to determine a plant, *Goetzea elegans* (beautiful goetzea, matabuey, manzanilla), to be an endangered species under the authority of the Endangered Species Act as amended. *Goetzea elegans* is only found in the evergreen and semievergreen seasonal forests that occur on limestone in northern Puerto Rico. Only 24 plants are known to exist, some on land owned by the Government of the Commonwealth of Puerto Rico and the others on privately owned land. The continued existence of this species is endangered by possible road straightening and widening, periodic

trimming of roadside vegetation, potential limestone mining and cattle management practices, and a proposed amusement park complex. This proposal, if made final, would implement the protection provided by the Endangered Species Act of 1973, as amended, for *Goetzea elegans*. The Service seeks data and comments on this proposal.

DATE: Comments from all interested parties must be received by August 17, 1984. Public hearing requests must be received by August 2, 1984.

ADDRESSES: Comments and materials concerning this proposal should be sent to the Ecological Service Field Supervisor, U.S. Fish and Wildlife Service, P.O. Box 3005, Marina Station, Mayagüez, Puerto Rico 00709-3005. Comments and materials received will be available for public inspection by appointment at this office during usual business hours and at the Service's Regional Office, Richard B. Russell Federal Building, Room 1282, 75 Spring Street SW., Atlanta, Georgia 30303.

FOR FURTHER INFORMATION CONTACT:

Mr. Agustín P. Valido at the above Mayagüez address (809/833-5760 or FTS 967-1221) or Mr. Kenneth Chitwood at the above Atlanta Regional Office address (404/221-3583 or FTS 242-3583).

SUPPLEMENTARY INFORMATION:**Background**

The genus *Goetzea*, usually referred to the family Solanaceae (the white potato and tomato family), also has been segregated with four other small genera into a distinct family of its own, the Goetzeaceae (Willis, 1973). The only other representative of the genus, *G. ekmanii* from the island of Hispaniola, is thought to be no longer extant in the Dominican Republic (D'Arcy, pers. comm. to Vivaldi, 1980).

Goetzea elegans was first collected in Puerto Rico in 1827 by Heinrich Wydler; it was found growing along a hedge mostly composed of a large bromelaid. The exact locality was not given when the species was described and named by Wydler (1830) to honor the German theologian J. E. Goetze, but it is believed to have been Quebradillas. Quebradillas was the source of specimens collected

by Bello in 1881 along a hedge composed, in part, of *Bromelia pinguin*. Three other historic populations are now considered extirpated. These include: the northern foothills of the Luquillo Mountains, recorded by Eggers in 1883 and by Holridge and Gehart in 1936; south of Canóvanas, recorded by Vélez and Marrero between 1939 and 1950 (Woodbury, pers. comm. to Vivaldi); and in the Cambalache Commonwealth Forest (Woodbury, 1975). The three known sites now occupied by *Goetzea elegans* occur over ¼ mile (0.4 km) (Vivaldi and Woodbury, 1981), and are located at the edge of a semievergreen seasonal forest on limestone at elevations below 656 feet (200 m) in the Guajataca Gorge area.

Goetzea elegans is an evergreen shrub or small tree up to 30 feet (9 m) tall and with stems up to 5 inches (13 m) thick. The leaves are simple, alternate, and range up to 4 inches (10 cm) long and up to 2 inches (5 cm) wide; the upper surface is dark shiny green, and the lower surface is pale green. *Goetzea elegans* has been observed with flowers and fruits in the months of May to August. Usually a single orange flower is borne on a curved stalk in the leaf axil, and there may be several terminal flowers. The flowers are symmetrical and funnel-shaped. The fruit is one-seeded, orange, subglobose, and about ¾ inch (2 cm) in diameter.

Goetzea elegans was recommended for Federal listing by the Smithsonian Institution (Ayensu and DeFillips, 1978). In August 1979, the Service contracted Dr. José L. Vivaldi, a resident botanist of Puerto Rico, to conduct a status survey of some plants thought to be candidates for listing as endangered or threatened in Puerto Rico and the Virgin Islands. Reports and documentation resulting from this survey recommended that *Goetzea elegans* be proposed for listing as an endangered species. On December 15, 1980, the Service published a notice in the *Federal Register* (45 FR 82479) naming those plant taxa being considered for listing as endangered or threatened species; *Goetzea elegans* was included.

In a notice published in the *Federal Register* on February 15, 1983 (48 FR 67320), the Service reported the earlier acceptance of the new taxa in the Smithsonian's 1978 book as under petition within the context of section 4(b)(3)(A) of the Act, as amended in 1982. On October 13, 1983, the petition finding was made that listing *Goetzea elegans* was warranted but precluded by other pending listing actions, in accordance with section 4(b)(3)(B)(iii) of the Act; notification of the finding was

published in the January 20, 1984, *Federal Register* (49 FR 2485), such a finding requires a recycling of the petition, pursuant to section 4(b)(3)(C)(i) of the Act. Therefore, a new finding must be made; we find that the petitioned action is warranted and hereby publish the proposed rule to implement the action in accordance with section 4(b)(3)(B)(ii) of the Act.

Summary of Factors Affecting the Species

Section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations promulgated to implement the listing provisions of the Act (codified at 50 CFR Part 424, under revision to accommodate 1982 Amendments—see proposed rule of August 8, 1983 (48 FR 36062)) set forth the procedures for adding species to the Federal lists. A species shall be determined to be an endangered or a threatened species due to one or more of the five factors described in that section. These factors and their application to *Goetzea elegans* Wydler, beautiful goetzea or matabuey, are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* The three extant sites occupied by *Goetzea elegans* are located in the Guajataca Gorge area. One site managed and probably owned by the Commonwealth Department of Transportation and Public Works and one privately owned site are periodically cleaned and cleared of vegetation near the roadside. This results in serious habitat disturbance, which has adversely affected *Goetzea elegans* and its associated plant communities (see also factor E below).

A possible threat is road construction. In recent years, many roads have been resurfaced or widened in Puerto Rico. Some of the roads in the Guajataca area are now being repaired, straightened, or widened, including Highway Number 2. This action, unless done with consideration and care, could either destroy or substantially modify habitat upon which individuals of *Goetzea elegans* depend. In 1955, one of the present sites had over 30 plants, now reduced to one because of forest conversion to pasture, and road widening.

Another privately owned site with six plants is located between the preceding sites on a forested limestone hillside and is not in use. South of this area, land is utilized as cattle pasture. Nearby limestone hills owned by the same person are being mined for fill material. A possible place for development would be the area now occupied by the hills, which could be razed, sold for limestone

and fill material, and converted to pasture area. These activities would result in the complete destruction of the habitat.

A newly proposed project that may threaten the species is a recreational complex to be located off a nearby road. The complex reported would include the largest amusement park in the Caribbean, with an associated resort. This project and the secondary development that would accompany it could destroy or adversely modify the species' habitat.

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* Taking has not been a documented factor in the decline of this species, but could easily become so in the future. The species occurs along a road near habitations and is of ornamental potential. Professional cultivation from cuttings and tissue culture is being attempted.

C. *Disease or predation.* Grazing could become a threat in the future at one of the privately owned sites, since adjacent lands are already being used as a cattle pasture. At the site with a single specimen, three root suckers are sprouting into a nearby pasture from the fence area.

D. *The inadequacy of existing regulatory mechanisms.* The Commonwealth of Puerto Rico does not have specific legislation or rules to protect endangered or threatened plant species, although a list of vulnerable species exists. If mining activities become involved, the Department of Natural Resources presumably could prohibit such activities in order to save that site of the species by making reference to Law 144, June 3, 1976, "Extracción de materiales de la corteza terrestre," which regulates sand extraction. However, whether or not this prohibition could be used to control taking of a federally listed endangered species would depend on Commonwealth courts' interpretation; there is no established precedent.

E. *Other natural or manmade factors affecting its continued existence.* Periodic trimming of *Goetzea elegans* along the roadside during routine vegetation management for road maintenance is the most serious immediate threat to the species. *Goetzea elegans* are sometimes cut back to the ground. This practice has resulted in stunted growth and is probably responsible for the lack of observed flowers and fruits in recent years, as well as the lack of seedlings.

Goetzea elegans is found in three small, compact, isolated sites probably composing one population. Only 24

individuals are known over ¼ mile (0.4 kilometer), less than half the number there in 1955. Loss of genetic variation in the species is therefore probable. It has a very narrow ecological niche and is restricted to ravines and ledges in semievergreen seasonal forests on limestone. These factors make *Goetzea elegans* even more vulnerable to the threats described above.

The careful assessment of the best scientific information available, as well as the best assessment of the past, present, and future threats faced by this species, were considered in determining the preferred action of this rule. Based on this evaluation, the preferred action is to list *Goetzea elegans* as an endangered species. With so few individuals known and the risk of damage to the plant and/or its habitat so high, endangered rather than threatened status seems an accurate assessment of the species's condition. It is not prudent to propose critical habitat because doing so would increase risk for the species as detailed below.

Critical Habitat

Section 4(a)(3) of the Endangered Species Act, as amended, requires that to the maximum extent prudent and determinable, any habitat of the species that is thought to be critical habitat shall be designated concurrently with listing the species as endangered or threatened. The Service has determined that designation of critical habitat for *Goetzea elegans* is not prudent at this time.

As discussed under threat factor B above, *Goetzea elegans* is potentially threatened by collecting, an activity regulated by the Endangered Species Act with respect to plants only on lands under Federal jurisdiction; such lands are not involved in this proposal. Publication of critical habitat localities along the road where the species occurs would increase the risk of taking or vandalism. The extreme vulnerability of *Goetzea elegans* to any collecting would make it quite detrimental to the survival of the species. Thus, determination of critical habitat for *Goetzea elegans* would not be prudent at this time.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing encourages and results in conservation actions by other Federal, Commonwealth, and private agencies, groups, and individuals. The

Endangered Species Act provides the possibility for land acquisition, cooperative efforts with the Commonwealth, and requires recovery actions for all listed species. These actions are initiated by the Service following listing. The protection required by Federal agencies and other prohibitions are discussed, in part, below.

Section 7(a) of the Act, as amended, requires all Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR 402 and are now under revision (see proposed rule of June 29, 1983; 49 FR 29989). For a proposed species, agencies are required by Section 7(a)(4) to informally confer with the Service on any action likely to jeopardize the continued existence of the species. After publication of a final rule, section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the species. The only Federal involvement known at this time is that of the Federal Highway Administration. In the event that highways are widened or resurfaced in this area, a strong commitment will be needed to protect *Goetzea elegans*. Without the protection provided by the Act, the species could be brought to extinction or its habitat substantially modified. Road designers and work crews would need to be alerted so that the plants are taken into consideration in any plans for the reconstruction of nearby roads. Such work should be done with utmost care and would require that the habitat of *Goetzea elegans* be left undamaged. It is not known whether there would be any Federal involvement in the amusement park complex proposed. Any Federal authorization, funding, or participation in this project would be subject to the provisions of section 7 discussed above.

The Act and implementing regulations found at 50 CFR 17.61, 17.62, and 17.63 set forth a series of general trade prohibitions and exceptions which apply to all endangered plant species. With respect to *Goetzea elegans* all trade prohibitions of section 9(a)(2) of the Act, as implemented by 50 CFR 17.61, would apply. These prohibitions, in part, would make it illegal for any person subject to the jurisdiction of the United States to import or export, transport in interstate or foreign commerce in the course of a commercial activity, or sell or offer for sale this species in interstate or foreign commerce. Certain exceptions could apply to agents of the Service and

Commonwealth conservation agencies. The Act and 50 CFR 17.62 also provide for the issuance of permits to carry out otherwise prohibited activities involving endangered species under certain circumstances. International trade and interstate commercial trade in *Goetzea elegans* are not known to exist, and the plant is very rare in experimental cultivation. It is anticipated that few permits involving plants of wild origin would ever be issued.

Section 9(a)(2)(B) of the Act, as amended in 1982, makes it unlawful to remove and reduce to possession endangered plant species from areas under Federal jurisdiction. The new prohibition would apply to *Goetzea elegans*. Permits for exceptions to this prohibition are available through section 10(a) of the Act until revised regulations are promulgated to incorporate the 1982 Amendments. Proposed regulations implementing this new prohibition were published on July 8, 1983 (48 FR 31417), and these will be made final following public comment. *Goetzea elegans* is not known to occur on any Federal lands at this time, so requests for taking permits are not anticipated. Requests for copies of the regulations on plants and inquiries regarding them may be addressed to the Federal Wildlife Permit Office, U.S. Fish and Wildlife Service, Washington, D.C. 20240, (703/235-1903).

If this species is listed under the Act, the Service will review its status to determine whether it should be placed on the Annex to the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere, which is implemented through section 8A(e) of the Act, and whether it should be considered under other appropriate international agreements.

Public Comments Solicited

The Service intends that any rules finally adopted will be accurate and as effective as possible in the conservation of each endangered or threatened species. Therefore, any comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, private interests, or any other interested party concerning any aspect of these proposed rules are hereby solicited. Comments particularly are sought concerning:

(1) Biological, commercial trade, or other relevant data concerning any threat (or lack thereof) to *Goetzea elegans*;

(2) The location of any additional populations of *Goetzea elegans* and the reasons why any habitat of this species should or should not be determined to

be critical habitat as provided by Section 4 of the Act;

(3) Additional information concerning the range and distribution of this species; and

(4) Current or planned activities in the subject area and their possible impacts on *Goetzea elegans*.

Final promulgation of regulations on *Goetzea elegans* will take into consideration the comments and any additional information received by the Service, and such communications may lead to a final regulation that differs from this proposal.

The Endangered Species Act provides for a public hearing on this proposal if requested. Requests must be filed within 45 days of the date of the proposal. Such requests should be made in writing and addressed to the Ecological Services Field Supervisor, U.S. Fish and Wildlife Service, P.O. Box 3005, Marina Station, Mayagüez, Puerto Rico 00709-3005 (809/833-5760).

National Environmental Policy Act

In accordance with a recommendation from the Council on Environmental Quality (CEQ), the Service has not prepared any NEPA documentation for this proposed rule. The recommendation from CEQ was based, in part, upon a decision in the Sixth Circuit Court of Appeals, which held that the preparation of NEPA documentation

was not required as a matter of law for section 4(a) actions under the Endangered Species Act. *PLF v. Andrus* 657 F.2d 829 (6th Cr., 1981); 48 FR 49244.

References

- Ayensu, E.S., and R.A. DeFilipps. 1978. Endangered and Threatened Plants of the United States. Smithsonian Institution and World Wildlife Fund. Washington, D.C.
- Vivaldi, J.L., R.O. Woodbury, and H. Diaz-Soltero. 1981. *Goetzea elegans* Wydler. Status report submitted to the U.S. Fish and Wildlife Service, Mayagüez, PR.
- Willis, J.C. 1973. A Dictionary of the Flowering Plants and Ferns, 8th Edition. Revised by H.K. Airy Shaw. Cambridge University Press, Cambridge, England.
- Woodbury, R.O. 1975. The Rare and Endangered Plants of Puerto Rico. U.S.D.A. Soil Conservation Service and Puerto Rico Department of Natural Resources, San Juan, PR.
- Wydler, H. 1830. *Plantarum quarundam descriptiones*. Linnaea 5:423-425, pl. VIII.

Author

The primary author of this proposed rule is Mr. Agustín P. Valido, U.S. Fish and Wildlife Service, Mayagüez Field Station, Mayagüez, Puerto Rico. Status information and a preliminary package

were provided by Dr. José L. Vivaldi. Cond. Parque de las Fuentes, Hato Rey, Puerto Rico. Dr. Bruce MacBryde of the Service's Washington Office of Endangered Species served as editor.

List of Subjects in 50 CFR Part 17

Endangered and threatened wildlife. Fish, Marine mammals, Plants (agriculture).

Proposed Regulation Promulgation

PART 17—[AMENDED]

Accordingly, it is hereby proposed to amend Part 17, Subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, as set forth below:

1. The authority citation for Part 17 reads as follows:

Authority: Pub. L. 93-205, 87 Stat. 884; Pub. L. 94-359, 90 Stat. 911; Pub. L. 95-632, 92 Stat. 3751; Pub. L. 96-159, 93 Stat. 1225; Pub. L. 97-304, 96 Stat. 1411 (16 U.S.C. 1531 *et seq.*)

2. It is proposed to amend § 17.12(h) by adding, in alphabetical order by family, genus, and species, the following to the List of Endangered and Threatened Plants:

§ 17.12 Endangered and threatened plants.

(h) * * *

Species		Historic range	Status	When listed	Critical habitat	Special rules
Scientific name	Common name					
Solanaceae—white potato family:						
<i>Goetzea elegans</i>	Beautiful goetzea (matabuey, manzanilla)	U.S.A. (PR)	E		NA	NA

Dated: June 6, 1984.

J. Craig Potter,

Acting Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 84-18242 Filed 6-15-84; 8:45 am]

BILLING CODE 4310-55-M